

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 00-077

AMENDED WASTE DISCHARGE REQUIREMENTS
for
CORRECTIVE ACTION PROGRAM
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(CALABASAS LANDFILL, UNINCORPORATED LOS ANGELES COUNTY)
(FILE NO. 60-118)
(Order No. 89-053)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

1. The County Sanitation Districts of Los Angeles County (hereafter "discharger") operates the Calabasas Landfill, currently, a 210-acre, Class III nonhazardous solid waste management facility located at 5300 Lost Hills Road, in an unincorporated area of Los Angeles County (Figure 1).
2. The landfill was formerly operated as a Class II (designated waste) facility from February 14, 1961 through September 14, 1965. It was then operated as a Class I (hazardous waste) facility through July 31, 1980. Current fill operations at the waste management facility are the subject of Waste Discharge Requirements (WDRs) adopted by this Regional Board in Order No. 89-053 (Monitoring and Reporting Program 4992) on May 22, 1989.
3. Order No. 89-053, Provision C.6, requires the discharger to institute a Corrective Action Program (CAP) if representative analyses of the groundwater shows a statistically significant increase in any Water Quality Protection Standard (WQPS), which are concentration limits for constituents of concern based upon established site-specific background concentrations.
4. All fill areas are also subject to the requirements of Regional Board Super Order No. 93-062, adopted by the Regional Board on September 27, 1993, which implement the provisions of federal Subtitle D requirements, as contained in Title 40, Code of Federal Regulations, Part 258, as well as State landfiling regulations contained in Title 27, California Code of Regulations. These regulations specify that the WQPS for a CAP will not exceed background concentrations, unless the Regional Board finds that it is technologically or economically infeasible to achieve background concentrations.

FIGURE 1 - SITE LOCATION MAP

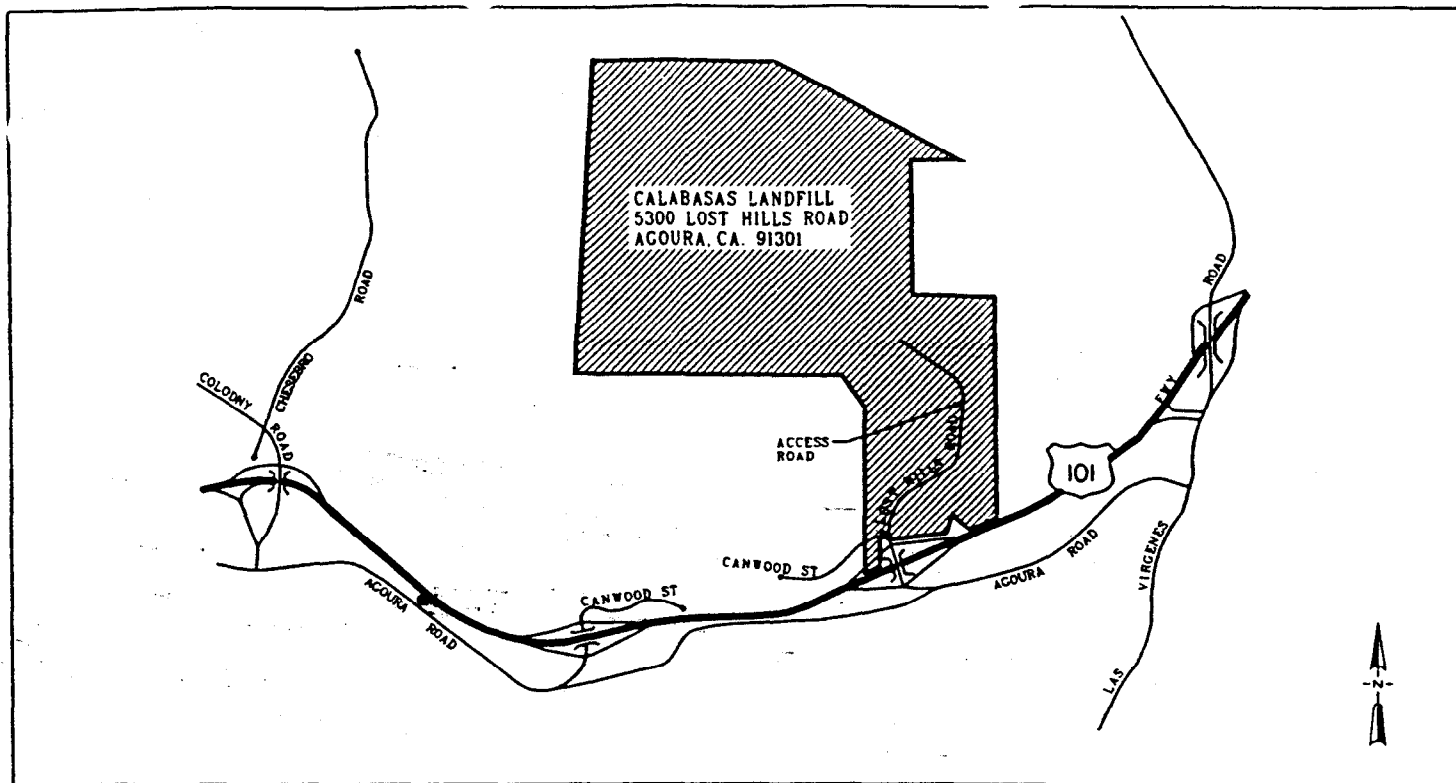
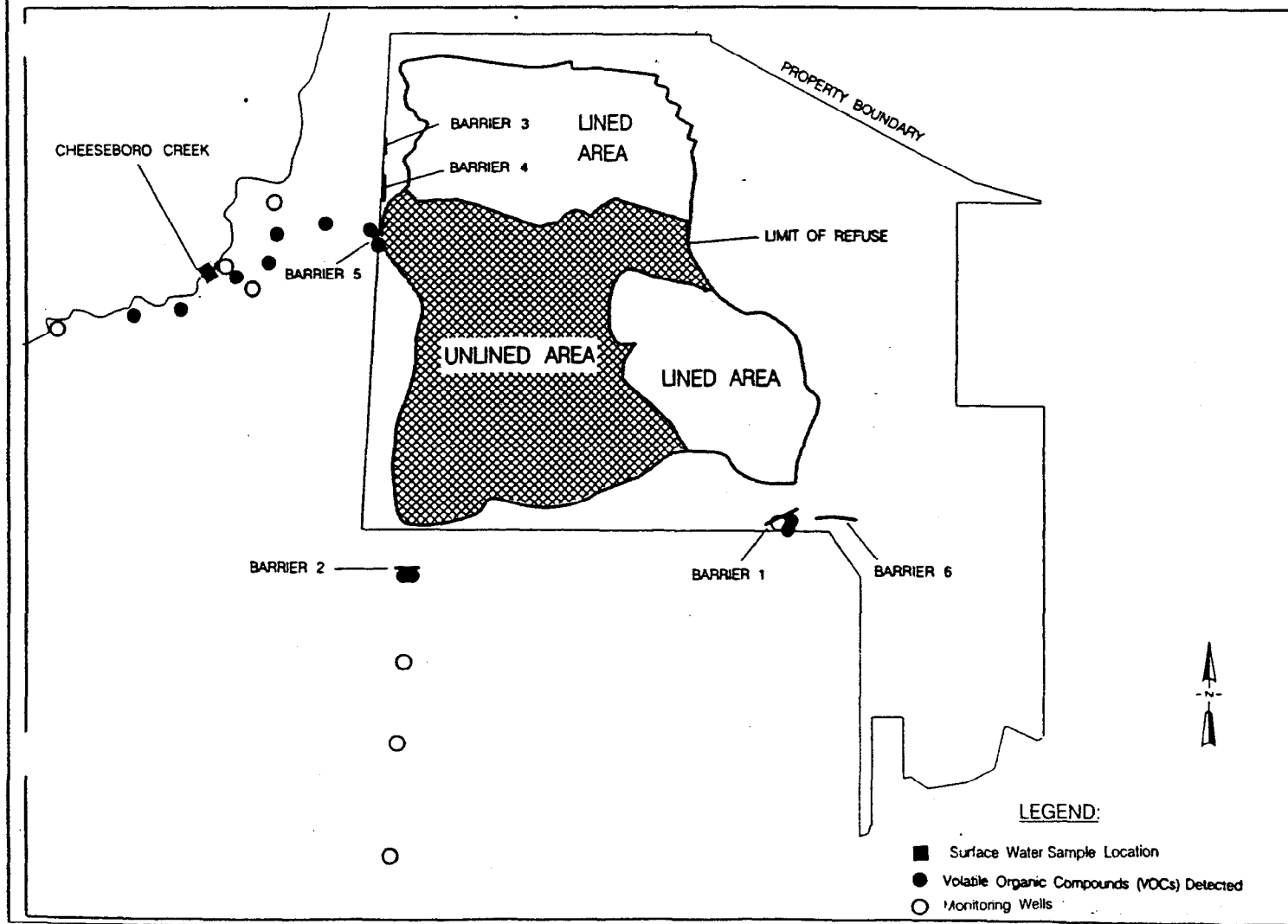


FIGURE 2 - IDENTIFIED SITE AREAS



**COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
CALABASAS LANDFILL
(Corrective Action Program)
Order No. 00-077**

File No. 60-118

5. The Calabasas Landfill is underlain by folded and faulted, generally low-permeability, sedimentary marine bedrock units. Unconsolidated surficial deposits, which include alluvium, colluvium, landslide deposits, and artificial fill, can transmit limited amounts of water to any saturated alluvium and weathered bedrock immediately underlying the landfill. The limited amounts of groundwater in the unconsolidated surficial deposits and in the near-surface bedrock is impeded and extracted at six subsurface barriers located in former surface drainage courses around the landfill.
6. The Calabasas Landfill is situated in a former canyon area located outside of the Las Virgenes and Lindero Hydrologic Areas. Groundwater in the two areas is of poor quality due to high total dissolved solids, sulfates, and also generally has very low yield. Groundwater and surface waters of these subareas are not used for drinking water.
7. The Calabasas Landfill is comprised of a number of sequential fill areas, most of which have some type of modern liner system (Figure 2). The oldest portion of the landfill is unlined, but has an operating landfill gas extraction system in addition to Subsurface Barrier Nos. 1, 2, and 5. This area received hazardous waste, and is the subject of this Corrective Action Program. All other portions of the landfill, including Subsurface Barrier Nos. 3, 4 and 6, remain in a Detection Monitoring Program (no release detected).
8. Volatile organic compounds (VOCs), consisting of trichloroethylene (TCE), vinyl chloride, cis-1,2-dichloroethylene (cis-1,2-DCE), 1,2-dichloroethane (1,2-DCA), perchloroethylene (PCE), p-dichlorobenzene (p-DCB), and 1,1-dichloroethane (1,1-DCA), have been detected in concentrations above drinking water standards (Department of Health Services' Maximum Contaminant Levels-MCLs) at Subsurface Barrier No. 5. Cis-1,2-DCE, 1,1-DCA, 1,2-DCA, and vinyl chloride have been detected in concentrations above MCLs at Subsurface Barrier No. 1. TCE, cis-1,2-DCE, 1,2-DCA, 1,1-DCA, and vinyl chloride have been detected in concentrations above MCLs at Subsurface Barrier No. 2.
9. The discharger has completed the Evaluation Monitoring Program (EMP) for the VOCs detected in groundwater monitoring wells downgradient of Subsurface Barrier Nos. 1, 2, and 5. The full lateral and vertical extent of the VOCs has been determined based upon numerous subsurface investigations performed between 1992 and 2000.

**COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
CALABASAS LANDFILL
(Corrective Action Program)
Order No. 00-077**

File No. 60-118

10. The EMP also focused on the relationship between groundwater pollution and Chesebore Creek, a perennial creek located within 1200 feet of Subsurface Barrier No. 5. Laboratory analyses of surface water and sediment samplings from Chesebore Creek did not detect any VOCs. Groundwater and creek base elevations indicate that the creek recharges groundwater during all seasons.
11. The discharger prepared a Final Engineering Feasibility Study (Feasibility Study) based upon the findings of the EMP, exploring eighteen corrective action technologies to mitigate the VOCs at Subsurface Barrier Nos. 1, 2, and 5.
12. Based upon the results of the Feasibility Study, the discharger submitted a draft Report of Waste Discharge (ROWD) on March 13, 2000, which proposes a CAP that continues source control by operation of the existing Subsurface Barrier Nos. 1, 2, and 5 groundwater extraction systems, continued landfill gas control, and allowing natural attenuation for offsite areas. Groundwater monitoring will be used to measure the effectiveness of the CAP. In addition, the discharger shall perform semi-annual trend analyses on data obtained from key groundwater monitoring wells.
13. Pursuant to the current State landfilling regulations contained in Title 27, California Code of Regulations, Section 21730(c), the discharger discussed the findings of the EMP, the Feasibility Study, and the proposed CAP at a public workshop held on April 11, 2000, which was attended by Regional Board staff.
14. On May 16, 2000, the discharger submitted a Final ROWD and CAP proposal which incorporated comments received at their public workshop, as well as responses to those comments.
15. The Regional Board adopted a revised Water Quality Control Plan for the Los Angeles Region on June 13, 1994. The Plan contains water quality objectives for groundwaters of the Las Virgenes and Lindero Canyon Groundwater Basin. Potential beneficial uses include municipal, domestic, and agricultural supply. The requirements in this amended Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
CALABASAS LANDFILL
(Corrective Action Program)
Order No. 00-077

File No. 60-118

16. The adoption of this CAP is being taken for the protection of the environment, and as such, is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000. et. seq.) pursuant to Title 14, California Code of Regulations, Section 15321.

IT IS HEREBY ORDERED that Order No. 89-053, adopted by the Regional Board on May 22, 1989, and amended by Super Order No. 93-062 on September 27, 1999, is amended by adding the following provisions:

J. Provisions for the CAP

1. The CAP for the mitigation of VOCs at Subsurface Barrier Nos. 1,2, and 5 at the Calabasas Landfill shall consist of source control by continued groundwater extraction at the barriers, continued landfill gas control, and allowing natural attenuation for offsite areas.
2. The WQPS for the CAP at Subsurface Barrier Nos. 1,2, and 5 of the Calabasas Landfill are as follows:

<u>Constituent</u>	<u>Laboratory Method*</u>	<u>Method Detection Limit (MDL)</u>	<u>WQPS</u>
TCE	8260	1 µg/L	1 µg/L
PCE	8260	1 µg/L	1 µg/L
Vinyl chloride	8260	0.3 µg/L	0.3 µg/L
cis 1,2-DCE	8260	1 µg/L	1 µg/L
1,2-DCA	8260	0.3 µg/L	0.3 µg/L
1,4-DCB	8260	1 µg/L	1 µg/L
1,1-DCA	8260	1 µg/L	1 µg/L

* All laboratory test methods are from "Test Methods for Evaluating Solid Waste-Physical/Chemical Methods" (SW846), 3rd Edition, U.S. EPA .

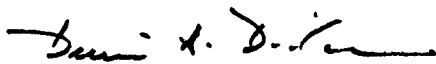
For any VOC not specified in this table, the WQPS will be the estimated quantitation limits specified in U.S. EPA Method 8260. The estimated quantitation limit is the lowest concentration that can be reliably achieved within the specified limits of precision and accuracy during routine laboratory operating conditions.

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
CALABASAS LANDFILL
(Corrective Action Program)
Order No. 00-077

File No. 60-118

3. Immediately following the adoption of this Order, the discharger shall implement the amended Monitoring and Reporting Program (MRP) CI 4992 to demonstrate the effectiveness of the CAP.
4. The discharger shall submit semi-annual reports to the Regional Board that describe the effectiveness of the CAP, according to the schedule outlined in revised MRP CI 4992. The report shall contain a trend analysis of data from key groundwater monitoring wells specified in MRP CI 4992.
5. If the discharger determines that the CAP does not satisfy the provisions of Title 27, California Code of Regulations, Section 20430 (i), the discharger shall, within 90 days of making the determination, submit an amended ROWD to make appropriate changes to the CAP.
6. All limitations, requirements, and provisions of Order No. 89-053 or any other amendments thereof, remain in full force and effect.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 29, 2000.



DENNIS A. DICKERSON
Executive Officer

\\BPB\\File:a\\Calabasas CAP

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,
LOS ANGELES REGION**

**AMENDED MONITORING AND REPORTING PROGRAM NO. 4992
(CORRECTIVE ACTION PROGRAM)**

**for
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Calabasas Landfill)
(Order No. 89-053)
(File No. 60-118)**

Monitoring and Reporting Program No. 4992 for the Calabasas Landfill is being amended to incorporate the following Monitoring and Reporting Program for the Corrective Action Program (CAP), pursuant to Title 27, California Code of Regulations, Section 20430. All other provisions of Monitoring and Reporting Program No. 4992 remain in effect.

The County Sanitation Districts of Los Angeles County (hereafter "discharger") shall implement this Monitoring and Reporting Program immediately following the adoption of Order No. 00-077:

I. GROUNDWATER MONITORING

- A. The following groundwater monitoring network shall constitute the Corrective Action Program Monitoring and Reporting Program at the Calabasas Landfill:

SUBSURFACE BARRIER NO. 1

Monitoring Well	Location	Depth (feet)	Comment
RO2A	Barrier No. 1-- downgradient;	68	To determine effectiveness of source control measures
RO2B	Barrier No. 1-- downgradient;	106	To determine vertical extent of VOCs
M22D	Barrier No. 1-- downgradient; offsite	67	To determine degree of natural attenuation

SUBSURFACE BARRIER NO. 2

Monitoring Well	Location	Depth (feet)	Comment
R06A	Barrier No. 2-- Downgradient;	23	To determine effectiveness of source control measures
R06B	Barrier No. 2-- Downgradient;	60	To determine effectiveness of source control measures
P10	Barrier No. 2-- Downgradient; offsite	85	To determine the lateral extent of VOCs and degree of natural attenuation
P11	Barrier No. 2-- Downgradient; offsite	165	To determine the lateral extent of VOCs and degree of natural attenuation

SUBSURFACE BARRIER NO. 5

Monitoring Well	Location	Depth (feet)	Comment
R07A	Barrier No. 5-- downgradient;	24	To determine effectiveness of source control measures
R07B	Barrier No. 5-- downgradient;	65	To determine the vertical extent of VOCs
R08B	Barrier No. 5-- downgradient;	51	To determine effectiveness of source control measures

County Sanitation Districts of Los Angeles County
Calabasas Landfill
Amended Monitoring and Reporting Program No. 4992

Order No. 00-077

M20S	Barrier No. 5— downgradient; offsite	33.5	To determine the lateral extent of VOCs and degree of natural attenuation
P64S	Barrier No. 5— downgradient; offsite	45	To determine the lateral extent of VOCs and degree of natural attenuation
P67S	Barrier No. 5— downgradient; offsite	50	To determine the lateral extent of VOCs and degree of natural attenuation
P68S	Barrier No. 5— downgradient; offsite	40	To determine the lateral extent of VOCs and degree of natural attenuation
P69S	Barrier No.5— downgradient;offsite	30	To determine the lateral extent of VOCs and degree of natural attenuation

- B. All of the above groundwater monitoring wells shall be sampled quarterly for the monitoring parameters listed on Table 1.
- C. All of the above groundwater monitoring wells shall be sampled every three years for the monitoring parameters listed on Table 2.

II. SURFACE WATER MONITORING

Cheseboro Creek shall be sampled quarterly (at the sampling point depicted in Figure 2 of Order No. 00-077) for the parameters listed on Table 1.

TABLE 1
QUARTERLY GROUNDWATER MONITORING PARAMETERS FOR CORRECTIVE ACTION PROGRAM

Field Parameters	Volatile Organic Compounds (continued)
DEPTH TO WATER	1, 2-DIBROMO-3-CHLOROPROPANE
PERCENT METHANE IN GAS	1,2-DIBROMOETHANE
PERCENT OXYGEN IN GAS	O-DICHLOROBENZENE
FIELD WATER TEMPERATURE	P-DICHLOROBENZENE
FIELD PH	TRANS-1, 4-DICHLORO-2-BUTENE
FIELD CONDUCTIVITY	1,1-DICHLOROETHANE
FIELD DISSOLVED OXYGEN	1,2-DICHLOROETHANE
	1,1-DICHLOROETHENE
	CIS-1,2-DICHLOROETHYLENE
General (Metal Surrogate Parameters)	TRANS-1,2-DICHLOROETHYLENE
pH	1,2-DICHLOROPROPANE
TOTAL DISSOLVED SOLIDS	CIS-1,3-DICHLOROPROPENE
NITRATE NITROGEN	TRANS-1,3-DICHLOROPROPENE
SULFATE	ETHYL BENZENE
CHLORIDE	2-HEXANONE
	BROMOMETHANE
Additional General Parameters	CHLOROMETHANE
BICARBONATE ALKALINITY	2-BUTANONE
TOTAL ALKALINITY	METHYL IODIDE
CALCIUM-HARDNESS	4-METHYL-2-PENTANONE
MAGNESIUM-HARDNESS	METHYLENE BROMIDE
SODIUM	METHYLENE CHLORIDE
POTASSIUM	STYRENE
SOLUBLE BOD	1,1,1,2-TETRACHLOROETHANE
SOLUBLE COD	1,1,2,2-TETRACHLOROETHANE
TOTAL ORGANIC CARBON	TETRACHLOROETHYLENE
AMMONIA NITROGEN	TOLUENE
	1,1,1-TRICHLOROETHANE
	1,1,2-TRICHLOROETHANE
Volatile Organic Compounds	TRICHLOROETHYLENE
ACETONE	TRICHLOROFLUOROMETHANE (CFC 11)
ACETONITRILE	1, 2, 3-TRICHLOROPROPANE
BENZENE	VINYL ACETATE
BROMOCHLOROMETHANE	VINYL CHLORIDE
BROMODICHLOROMETHANE	XYLENES, M- & O-P
BROMOFORM	
CARBON DISULFIDE	
CARBON TETRACHLORIDE	Additional Volatile Organic Compound
CHLOROBENZENE	
CHLOROETHANE	FREON 12
CHLOROFORM	
DIBROMOCHLOROMETHANE	

TABLE 2
CONSTITUENTS OF CONCERN FOR CORRECTIVE ACTION PROGRAM
IN ADDITION TO PARAMETERS LISTED IN TABLE 1

Additional General	Acid/Base/Neutral Extractable	Acid/Base/Neutral Extractable	Acid/Base/Neutral Extractable	Pesticides, Herbicides, &
ACTIVITY	7, 12-DIMETHYLBENZ(A)ANTHRACENE	BENZO(B)FLUORANTHENE	PENTACHLOROPHENOL	Organophosphorous
TOTAL BOD	3, 3'-DIMETHYLBENZIDINE	BENZO(G,H,I)PERYLENE	PHENOL	Compounds
TOTAL COD	M-DINITROBENZENE	BENZO(K)FLUORANTHENE	2,4,5-TRICHLOROPHENOL	2, 4, 5-T
IRON (FILTERED & TOTAL)	DIPHENYLAMINE	BIS(2-CHLOROETHOXY)METHANE	2,4,6-TRICHLOROPHENOL	DINOSEB
MANGANESE	ETHYL METHANESULFONATE	BIS(2-CHLOROETHYL)ETHER	N-NITROSODIPHENYLAMINE	THIONAZIN
OIL & GREASE	FAMPHUR	BIS(2-CL-ISOPROPYL)ETHER	O- CRESOL	DIMETHOATE
TOTAL ORGANIC HALOGEN(TOX)	HEXACHLOROPROPENE	BIS(2-ETHYLHEXYL)PHTHALATE	M+P- CRESOL	DISULFOTON
BORON	ISODRIN	4-BROMOPHENYL PHENYL ETHER	ETHYL METHACRYLATE	METHYL PARATHION
FLUORIDE	ISOSAFROLE	BUTYLBENZYL PHTHALATE	METHYL METHACRYLATE	ETHYL PARATHION
TOTAL HARDNESS	KEPONE	2-CHLORONAPHTHALENE		PHORATE
TOTAL CYANIDE	METHAPYRILENE	4-CHLOROPHENYL PHENYL ETHER		PP-DDE
TOTAL SULFIDE	3-METHYLCHOLANTHRENE	CHRYSENE		PP-DDD
	METHYL METHANESULFONATE	DIBENZ(A,H)ANTHRACENE		PP-DDT
Metals (Total and Filtered)	2-METHYLNAPHTHALENE	3,3'-DICHLOROBENZIDINE		ALPHA-BHC
ARSENIC	1, 4-NAPHTHOQUINONE	DIETHYL PHTHALATE		LINDANE (GAMMA-BHC)
BARIUM	1-NAPHTHYLAMINE	DIMETHYL PHTHALATE		HEPTACHLOR
CADMIUM	2-NAPHTHYLAMINE	DI-N-BUTYL PHTHALATE		HEPTACHLOR EPOXIDE
TOTAL CHROMIUM	O-NITROANILINE	2,4-DINITROTOLUENE		ALDRIN
ALT	M-NITROANILINE	2,6-DINITROTOLUENE		DIELDRIN
COPPER	P-NITROANILINE	DI-N-OCTYL PHTHALATE		ENDRIN
LEAD	N-NITROSODI-N-BUTYLAMINE	FLUORANTHENE		TOXAPHENE
MERCURY	N-NITROSODIETHYLAMINE	FLUORENE		METHOXYCLOR
NICKEL	N-NITROSOMETHYLETHYLAMINE	HEXACHLOROBENZENE		2,4-D(ACID)
SELENIUM	N-NITROSOPIPERIDINE	HEXACHLOROBUTADIENE	Additional Volatile Organic	2,4,5-TP(SILVEX)
SILVER	N-NITROSOPYRROLIDINE	HEXACHLOROCYCLOPENTADIENE	Compounds	BETA-BHC
ZINC	5-NITRO-O-TOLUIDINE	HEXACHLOROETHANE	ACROLEIN	DELTA-BHC
ANTIMONY	PENTACHLOROBENZENE	INDENO(1,2,3-C,D)PYRENE	ACRYLONITRILE	ENDOSULFAN I
BERYLLIUM	PENTACHLORONITROBENZENE	ISOPHORONE	ALLYL CHLORIDE	ENDOSULFAN II
THALLIUM	PHENACETIN	NAPHTHALENE	CHLOROPRENE	ENDOSULFAN SULFATE
TIN	P-PHENYLENEDIAMINE	NITROBENZENE	ISOBUTYL ALCOHOL	ENDRIN ALDEHYDE
VANADIUM	PRONAMIDE	N-NITROSODIMETHYLAMINE	M-DICHLOROBENZENE	TECHNICAL CHLORDANE
	SAFROLE	N-NITROSODI-N-PROPYLAMINE	METHACRYLONITRILE	POLYCHLORINATED BIPHENYLS
Acid/Base/Neutral Extractable	1,2,4,5-TETRACHLOROBENZENE	PHENANTHRENE	PROPIONITRILE	AROCLOR 1016
ACETOPHENONE	2,3,4,6-TETRACHLOROPHENOL	PYRENE	1, 1-DICHLOROPROPENE	AROCLOR 1221
2-ACETYLAMINOFLUORENE	O-TOLUIDINE	2-CHLOROPHENOL	1, 3-DICHLOROPROPANE	AROCLOR 1232
4-AMINOBIIPHENYL	O,O,O-TRIETHYLPHOSPHOROTHIOATE	1,2,4-TRICHLOROBENZENE	2-CHLOROETHYL VINYL ETHER	AROCLOR 1248
BENZYL ALCOHOL	SYM-TRINITROBENZENE	2,4-DICHLOROPHENOL	2, 2-DICHLOROPROPANE	AROCLOR 1260
P-CHLOROANILINE	ACENAPHTHENE	2,4-DIMETHYLPHENOL		AROCLOR 1242
OROENZILATE	ACENAPHTHYLENE	2,4-DINITROPHENOL		AROCLOR 1254
ALLATE	ANTHRACENE	2-METHYL-4,6-DINITROPHENOL		
DIBENZOFURAN	BENZIDINE	2-NITROPHENOL		
2, 6-DICHLOROPHENOL	BENZO(A)ANTHRACENE	4-NITROPHENOL		
P(DIMETHYLAMINO)AZOBENZENE	BENZO(A)PYRENE	4-CHLORO-3-METHYLPHENOL		

III. GROUNDWATER/SURFACE WATER QUALITY REPORTING

Quarterly monitoring reports shall be submitted by the discharger by the dates listed in the following schedule:

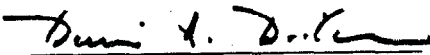
<u>Reporting Period</u>	<u>Report Due Date</u>
January – March	May 15th
April – June	August 15th
July – September	November 15th
October – December	February 15th

IV. CAP REPORTING

Semi-annual monitoring reports that describe the effectiveness of the CAP shall be submitted by the discharger by the dates listed in the following schedule and incorporated into the appropriate quarterly groundwater quality monitoring reports :

<u>Reporting Period</u>	<u>Report Due Date</u>
January - June	August 15th
July-December	February 15 th

These reports shall contain a trend analysis for data from the following key groundwater Monitoring wells: R02A, M22D, R06A, R06B, R07A, and R08B.

Ordered By: 
DENNIS A. DICKERSON
Executive Officer

Date: June 29, 2000

19-AA-0056

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 89-053

WASTE DISCHARGE REQUIREMENTS
for
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(CALABASAS LANDFILL)
(File No. 82-67)

60-118

The California Regional Water Quality Control Board, Los Angeles Region finds:

1. The Calabasas Landfill is currently a 505-acre, Class III waste disposal facility located near Agoura, California, in unincorporated Los Angeles County. The landfill is owned by the County of Los Angeles (the County), and operated by the County Sanitation Districts of Los Angeles County (CSDLAC) under a Joint Powers Agreement with the County. The landfill was formerly operated as a Class II facility from February 14, 1961 through September 14, 1965. It was then operated as a Class I facility through July 31, 1980, when CSDLAC voluntarily suspended Class I operations, and began operating the landfill as a Class III facility. The landfill was formally reclassified as a Class III facility on August 23, 1982.
2. The current disposal area is underlain by approximately 250 feet of solid waste fill material, reaching a surface elevation of 1300 feet above mean sea level (MSL). Proposed landfilling will reach a maximum elevation of 1350 feet MSL and will slope down-canyon to the surrounding property. The average daily rate of waste disposal during calendar year 1988 was 2500 tons per day. The estimated total refuse capacity under the Conditional Use Permit (Reference Finding No. 9, below) is approximately 30 million cubic tons, including daily, intermediate, and final cover material. The estimated remaining landfill capacity, as of April, 1989, is approximately 18 million tons.
3. On December 8, 1960, this Regional Board adopted Resolution No. 60-75, prescribing waste discharge requirements for the disposal of nonhazardous solid and certain "semi-liquid" wastes, and inert wastes on the landfill, which consisted of 300 acres at that time (Reference Finding No. 15, below).
4. On January 30, 1961, Industrial Waste Permit No. 2464 was issued to the Calabasas Landfill by the Los Angeles County Engineer, and approved by this Regional Board as requirements by this Regional Board on April 19, 1961. This permit was rescinded by the County on June 6, 1961, in accordance with County Ordinance No. 8023.
5. On September 15, 1965, this Regional Board adopted Resolution No. 65-47, prescribing waste discharge requirements for the disposal of liquid, semi-liquid and solid hazardous wastes in addition to nonhazardous solid and certain "semi-liquid" wastes, and inert wastes, and rescinded Resolution No. 60-75.

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

6. In 1966, under the authority of the Joint Powers Agreement with the County, CSDLAC purchased an additional 80 acres contiguous to the northern boundary of the landfill, which have no prescribed waste discharge requirements. The requirements contained in this Order will include the disposal of wastes to this parcel (Reference Finding No. 15, below).
7. On July 28, 1972, this Regional Board adopted a "Monitoring and Reporting Program", thereby amending Resolution No. 65-47.
8. In early 1972, under the authority of the Joint Powers Agreement with the County, CSDLAC purchased an additional 36 acres contiguous to the northern boundary of the landfill, for the purpose of CSDLAC conducting a refuse fill operation, bringing the total permitted and unpermitted acreage to 416 acres (reference Finding No. 15, below).
9. On August 9, 1972, the Los Angeles County Regional Planning Commission issued Conditional Use Permit Case No. 5022-(5) (CUP) to CSDLAC, encompassing all 416 acres of the landfill in accordance with a plot plan submitted by CSDLAC. Any expansion of the site beyond the fill limits of the plot plan shall require the issuance of new Waste Discharge Requirements.
10. On April 27, 1981, this Regional Board adopted Resolution 81-12, revising portions of Resolution 65-47, prohibiting disposal of all liquid and solid hazardous wastes, effective July 31, 1980, and requiring certain engineering features and ground water monitoring programs.
11. On August 23, 1982, this Regional Board adopted Resolution 82-67 and Monitoring and Reporting Program No. 4992. This Resolution reclassified the landfill as a Class III facility, and prescribed waste discharge requirements for the disposal of nonhazardous solid and certain "semi-liquid" wastes, and inert wastes on 300 of the 416 acres at the landfill, and rescinded all other prior requirements and Orders adopted by the Board.
12. On October 14, 1983, Facility Permit No. 19-AA-056 was issued by the County of Los Angeles Department of Health Services, which was approved by the California Waste Management Board. Application for a five year review of the Facility Permit was recently submitted on November 30, 1988.
13. In 1983, under the authority of the Joint Powers Agreement with the County, CSDLAC purchased an additional 89 acres contiguous to the eastern boundary of the landfill for access purposes, bringing the total permitted acreage to 416 acres, and total acreage to 505 acres.
14. On March 6, 1989, a new Industrial Waste Permit (File No. I-4016-5) was issued to the Calabasas Landfill by the Los Angeles County Department of Public Works. This permit supercedes Industrial Waste Permit No. 2464.
15. Land use designations for the Landfill site were filed prior to the enactment of the California Environmental Quality Act and as such, no Environmental Impact Report has been filed for the Calabasas Landfill. The County of Los Angeles has issued land use permits for the three parcels at the site which were intended for landfilling purposes shortly after each were acquired. Together, these parcels contain approximately 416 of the total 505 site acres. The first (Zone Exception Case No. 3349(5)), was issued in 1958 for a 300-acre site parcel. A second was issued in 1968 for an 80-acre addition (Zone Exception Case No. 8477-(5)). These land use permits granted an expansion of the refuse landfilling operations to 380 acres. A third land use permit was issued in 1972 (Conditional Use Permit No. 5022-(5)) for an approximate 36-acre addition, which included a description of landfilling operations on a total of 416 acres of the site. An

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

Environmental Impact Statement was included as part of this application. An approximate 89-acre adjoining parcel was added in 1983 for the purposes of constructing an access road to the site, and is not intended for landfilling purposes. The current total permitted and unpermitted acreage at the site consists of 505 acres.

16. The Calabasas Landfill is located in National Flood Insurance Program Community No. 065043. This area is classified as Zone C, designating the absence of flood hazard.

17. Land uses within one mile of the Calabasas Landfill include residential areas to the immediate southeast, and to the northeast, southwest and southeast. Undeveloped open space and cattle range surrounds the immediate boundaries of the landfill in all directions except to the southeast. Light industrial and commercial areas exist to the east, and wildlife sanctuary and recreational areas to the north. A school is located to the northeast.

18. A periodic waste load checking program has been implemented at the current disposal area and is proposed for all new areas of disposal operations at the site. This program shall insure that unauthorized hazardous materials are not deposited at this site.

19. The landfill is, and will be operated as, a modified "cut and cover" side hill landfill. Soil, for use as cover, is excavated within the site property, or provided by reclaiming clean dirt loads from the incoming waste stream. Cover is designed and constructed to minimize infiltration of precipitation. Refuse is spread and compacted in cells approximately 18-20 feet in height. On the face of the landfill, soil is placed at a minimum thickness of 7 feet normal to the front face (15 feet on the horizontal). An approximately 15 foot wide bench is constructed approximately every 40 vertical feet to provide slope stability, drainage and access for maintenance. This design provides for proper grading and drainage of surface water to eliminate ponding of such water on the site. CSDLAC has proposed to the California Waste Management Board to use shredded green waste as an alternative daily cover material for use at the Calabasas Landfill. From time to time, CSDLAC may evaluate the use of other materials as alternate cover material.

20. All known abandoned oil and water wells on the landfill site have been properly decommissioned according to appropriate Division of Oil and Gas (DOG) guidelines. Some improperly decommissioned wells may still exist for which no records exist. This Order specifies that upon discovery of any such wells, they will be properly decommissioned according to the appropriate DOG requirements.

21. A geologic and hydrogeologic investigation and follow-up study were prepared by LeRoy Crandall for CSDLAC in 1980 and 1981. These reports remain as the most comprehensive study of the site to date, although they have been supplemented by several subsequent investigations.

22. On September 3, 1987, CSDLAC filed an ROWD for the disposal to land of nonhazardous solid, certain "semi-solid" wastes, and inert solid wastes at the Calabasas Landfill, in accordance with Article 9 of Subchapter 15. CSDLAC proposed in the ROWD to open operations in an adjacent area, known as the 80-acre parcel, which is approved under the existing Conditional Use Permit and fill plan. Supplemental technical reports include detailed design plans and equipment specifications for compliance with Article 5 of Subchapter 15, the "Calabasas Landfill Subsurface Barrier System" report, the "Subchapter 15 Article 5 Compliance for the Calabasas Landfill" report, and the "Study of Liner Systems for the Calabasas Landfill" report, all dated April 15, 1988. This Order specifies that final design and construction methods for proposed engineered systems be reviewed and approved by this Regional Board prior to installation and use.

23. A seismic stability investigation was performed for CSDLAC, dated April 14, 1988. The study predicted expected peak ground accelerations (PGAs) of .20g associated with the maximum probable earthquakes (MPE) within a 100 year return period. The study further predicts that the landfill slopes will remain stable during an MPE resulting either from a large earthquake occurring along the San Andreas fault, or a moderate earthquake occurring closer to the landfill. These predictions are supported by the conditions found at the disposal site after the October 1, 1987 event. Subsequent inspection revealed no failures, settlement, or problems associated with the barrier or gas systems.

24. There are no known active faults onsite or within 200 feet of the Calabasas landfill site (in accordance with California Division of Mines and Geology Guidelines Nos. 37, 43 and 44). Active faults are defined as Holocene Epoch faults, meaning that they have shown surface movement in the last 11,000 years. The nearest active fault, the Newport-Inglewood Fault, is 8.5 miles to the south. Minor local faulting relative to folding is present onsite, but is not active.

25. The disposal site is underlain by two Miocene bedrock formations (Topanga and Modelo), and by Quaternary to Recent surficial deposits. The bedrock formations are classified in numerous groundwater investigations as non-waterbearing, according to definitions established by the Department of Water Resources (1961). Canyon waters collect locally in weathered and fractured zones, however, creating low-permeability perched aquifers. These aquifers have very slow rates of flow down the natural canyon gradients. The surficial units average 40 feet in thickness, and act as semi-perched aquifers for canyon waters, which percolate down-slope. These aquifers are intercepted by barrier and extraction systems at the canyon mouths. Artificial engineered fill is present, which is not designed to be nor considered to be water-bearing.

26. The disposal site is not located within any hydrologic unit; however, surface waters, perched ground waters, and semi-perched canyon waters, if not collected by the onsite controls, would otherwise drain into the Las Virgenes Canyon and Lindero Canyon Hydrologic Subareas of the Malibu Creek Hydrologic Area of the Malibu Hydrologic Unit of the Los Angeles River Basin.

27. The Board adopted a revised Water Quality Control Plan for the Los Angeles Basin on November 27, 1978. The Plan contains water quality objectives for surface and ground waters of the Las Virgenes and Lindero Hydrologic Subunits. Beneficial water uses near the Calabasas Landfill are provided for in the revised Water Quality Control Plan mentioned above. Existing beneficial uses include water contact and non-contact recreations, warm freshwater habitats and wildlife habitats. The requirements in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

28. Ground water in the vicinity of the Calabasas Landfill is limited both in quantity and quality. High salinity and mineral content (due to leaching of native marine soils and bedrock) renders it unsuitable and potentially unhealthful for most beneficial uses. Some wells were drilled in the area, and used for domestic, industrial, municipal and irrigation purposes, until the Las Virgenes Water District began importing superior quality water to the area, whereupon most of these wells were abandoned. At present, there is no significant use of ground water within this area, which is not likely to change in the future.

29. Due to the conditions described in Findings 26 and 27 above, and due to complex geologic and hydrogeologic conditions across the site, background values will be used where appropriate to establish water quality protection standards according to Requirement C-2 of this Order.

30. CSDLAC has installed a landfill gas recovery system (LGRS) at the landfill site. Gas is collected through extraction wells and rock-filled trenches, designed in accordance with Article 4 of Subchapter 15. The gas

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

is flared at a flare station consisting of two blowers and six gas flares located on site and operated by CSDLAC.

31. CSDLAC has installed separate surface water collection and groundwater extraction systems at the downgradient boundaries of the landfill in order to improve the water quality downgradient of the Calabasas Landfill. Extracted onsite water is passed through an air stripping tower and used for onsite dust control. Reclaimed wastewater from the Tapia Treatment Plant is also used for onsite dust control and irrigation, and is proposed for use as coolant for future energy recovery systems. This Order specifies waste discharge requirements for use of onsite reuse water and reclaimed wastewater.

32. Storm water at the site is controlled by channelled ditches, pipelines, drainage benches and interim drainage structures. The landfill surface is designed and graded to divert water around the area of active filling. Drainage structures carry runoff down the face of the landfill.

33. CSDLAC has constructed five subsurface barrier systems at the landfill, using approved methods of excavation and installation. The systems include the aforementioned ground water extraction systems, the barriers, and monitoring wells. All barriers are cement bentonite (slurry trench) barriers, and have permeabilities of $< 1 \times 10^{-6}$ cm/sec and minimum thicknesses of 24 inches.

34. Subchapter 15 requires a site operator to install a clay liner with a permeability of not more than 1×10^{-6} cm/sec when site characteristics alone are not adequate to ensure protection of the quality of ground water. CSDLAC has proposed liner systems under all future areas of operation, that are conceptually comprised of (from bottom to top) a subdrain, a one-foot thick clay liner of 1×10^{-6} cm/sec minimum permeability, a synthetic liner (80-mil, high density polyethylene), a one-foot thick blanket LCRS layer with a minimum of 1 cm/sec permeability geotextile filter material, and a protective layer of soil.

35. The 80-acre parcel, when lined, will meet the alternative construction criteria and guidelines of the State Water Resources Control Board for classification as a Class III disposal site, to receive selected non-hazardous solid wastes and inert wastes. The proposed designs and features of this area include subdrain systems, liner systems, leachate collection and removal systems (LCRS), vadose zone monitoring systems, subsurface barriers, and groundwater monitoring systems as described in the ROWD.

36. This Board has notified the discharger and interested agencies and persons of its intent to adopt waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public meeting heard and considered all comments pertaining to the discharge and to the tentative requirements.

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

IT IS HEREBY ORDERED, that the County Sanitation Districts of Los Angeles County shall comply with the following at the Calabasas Landfill:

A. Acceptable Materials

1. The Calabasas Landfill is a Class III landfill.
2. Wastes disposed of at this site shall be limited to certain nonhazardous solid wastes, inert solid wastes, as described in Subsection 2523(c) of Subchapter 15.
3. Nonhazardous solid waste means all putrescible and nonputrescible solid, semi-solid and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded solid and semi-solid wastes; provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of waters of the state (i.e., designated wastes). (Section 2523(a), Subchapter 15.)
4. Dewatered sewage or water treatment sludge may be discharged under the following conditions:
 - a. In areas where natural geologic characteristics and the consideration of all other factors listed in Subsection 2533(b) of Subchapter 15, will ensure no impairment of beneficial uses to groundwater, or in areas with approved LCRS and liner systems designed to prevent such impairment, the sludge contains at least 20 percent solids if primary sludge, or at least 15 percent solids if secondary sludge, mixtures of primary and secondary sludges, or water treatment sludge; and
 - b. In areas where natural geologic characteristics and overall site containment quality cannot be determined, and where no approved LCRS and liner systems exist, the sludge contains at least 50 percent solids whether primary or secondary sludge, mixtures of primary and secondary sludges, or water treatment sludge; and
 - c. A minimum solids to liquids ratio of 5:1 by weight shall be maintained to insure that the co-disposal will not exceed the initial moisture-holding capacity of the nonhazardous solid waste.
5. Incinerator ash may be discharged provided the ash does not contain soluble pollutants at concentrations in excess of applicable water quality objectives.

B. Unacceptable Materials

1. No hazardous wastes, designated wastes, or special wastes, such as liquids, oils, waxes, tars, soaps, solvents, or readily water-soluble solids, such as salts, borax, lye, caustic, or acids shall be disposed of at this site.

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

2. No semi-solid waste shall be disposed of at the site except as noted above. Semi-solid waste means waste containing less than 50 percent solids, as described in Subsection 2520(d)(3) of Subchapter 15. Additional exceptions may be granted pursuant to Subsection 2520(d)(3).
3. No materials which are of a toxic nature, such as insecticides, poisons, or radioactive materials, shall be disposed of at this site.
4. No infectious materials or hospital or laboratory wastes, except those authorized for disposal to land by official agencies charged with control of plant, animal, and human disease, shall be disposed of at this site.
5. No pesticide containers shall be disposed of at this site, unless they are rendered nonhazardous by triple rinsing.
6. No septic tank or chemical toilet wastes shall be disposed of at this site.
7. The discharge of wastes or waste byproducts (i.e., leachate or gas condensate) to natural surface drainage courses or to ground water is prohibited.

C. Ground Water Quality Protection Standards

1. In accordance with Subsection 2552 of Subchapter 15, the following water quality protection standards are established for this facility:

<u>Parameter</u>	<u>Units</u>	<u>Maximum Value</u>
Total dissolved solids	mg/l	4500*
Sulfate	mg/l	4300*
Chloride	mg/l	500
Boron	mg/l	2.0

*Based on Background data

2. Water quality protection standards may be modified by the Regional Board based on more recent or complete ground water monitoring data, changes in background water quality, or for any other valid reason.
3. The compliance point(s) where the water quality protection standards shall apply shall be along all downgradient edges of the disposal site.
4. The discharger shall use the statistical procedures contained in Subsection 2555(h) of Subchapter 15, to determine if there is a statistically significant increase for any indicator parameter. Upon approval of the Executive Officer, alternative statistical procedures may be used.
5. In the event a statistically significant increase is observed for any indicator parameter, the discharger shall establish a verification program in accordance with Subsection 2557(g) of Subchapter 15.
6. The discharger shall institute a corrective action monitoring program if representative analyses of the ground water show a statistically significant increase in any water quality protection standard in accordance with Subsection 2557(g) of Subchapter 15.

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

7. The compliance period for which the water quality protection standards are applicable shall be the entire active life of the site and during the closure and post-closure maintenance periods.

D. Requirements for Disposal Site Operations

1. All State, County and City sanitary health codes, rules, regulations and ordinances pertinent to the disposal of wastes on land shall be complied with in the operation and maintenance of this disposal site.

2. There shall be no damage or nuisance to the community due to odors or unsightliness, which result from unreasonable practices in the disposal of wastes at this site, as defined in Section 13050(l) of the CWC.

3. Neither the disposal nor handling of wastes at this site shall create pollution, as defined in Section 13050(l) of the CWC.

4. The periodic load checking program shall continue to be implemented to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable materials.

5. The discharger shall comply with notification procedures contained in Section 13271 of the CWC in regards to the discharge of hazardous substances. The discharger shall remove and relocate to a legal point of disposal, in accordance with County Health guidelines, any safely recoverable wastes which are discharged at this site in violation of these requirements. The Board shall be informed monthly in accordance with II-E of Monitoring and Reporting Program No. 4992 whenever relocation of wastes is necessary. The source and final disposition (and location) of the wastes, as well as methods undertaken to prevent future recurrences of such disposals shall also be reported. Those wastes which cannot be safely recovered shall be reported to the Board in writing within 7 days of the discharge.

6. Wastes deposited at this site shall be contained, and shall not be permitted to migrate off the site, or to enter offsite water drainage ditches or watercourses.

7. All wastes shall be adequately covered at the end of the operating day in accordance with Subsection 2544, Subchapter 15. Interim cover is daily cover and intermediate cover as defined by the California Waste Management Board. Interim cover over wastes discharged to this landfill shall be designed and constructed to minimize percolation of precipitation through wastes and contact with material deposited. To this end, ponding of liquids over deposited wastes is prohibited. Other measures shall be taken as needed, to prevent a condition of nuisance from fly breeding, rodent harborage, and other vector-related activities.

8. The migration of gases from the disposal site shall be controlled as necessary to prevent water pollution, nuisance or health hazards.

9. Gas condensate gathered from the gas monitoring and collection system at this disposal site shall not be returned to the site. Any proposed modifications or expansions to this system shall be designed to allow the collection, testing and treatment or disposal by approved methods of all gas condensate produced at the disposal site.

10. The discharger shall intercept, and remove to a legal point of disposal, any liquid detected in the LCRCs which does not meet the water quality standards established in Requirement E-6 of this Order.

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

11. In any area within the disposal site where seepage water is observed, provisions shall be made and/or facilities shall be provided to insure that seep water will not come in contact with decomposable refuse in the disposal site. The locations of all springs and seeps found prior to, during, or after placement of waste material that could affect this disposal site shall be reported to the Board.

12. The disposal site shall be graded and maintained, and drainage controls, structures, and facilities shall be designed to divert any precipitation or tributary runoff, erosion of refuse or cover materials, and prevent ponding and percolation of water at the site in compliance with Section 2546 of Subchapter 15, CAC. Temporary structures shall be installed as needed to comply with this requirement.

13. No polluted surface waters shall leave this site except as permitted by a National Pollutant Discharge Elimination System (NPDES) permit issued in accordance with the Federal Clean Water Act and the California Administrative Code (CAC).

14. Any abandoned wells or bore holes under the control of the site owner or operator and situated within site boundaries, must be located and properly modified or sealed to prevent mixing of any waters between adjacent water-bearing zones. A notice of intent to decommission a well must be filed with the appropriate regulatory agencies prior to decommissioning. Procedures used to decommission these wells, or to modify wells still in use, must conform to the specifications of the local health department or other applicable agencies.

15. The Regional Board shall be notified of any incident resulting from site operations that may endanger health or the environment by telephone within 24 hours and in writing within 7 days. The written notification shall fully describe the incident, including time of occurrence and duration of the incident, a description of the type of, time of, and duration of corrective measures, when correction will be complete (if the endangerment is continual), and the steps taken or planned to reduce or prevent recurrence.

E. Provisions for Onsite Use of Water

1. Except for reclaimed water, any waters used for landscape irrigation, dust control or other non-emergency uses, shall be subject to waste discharge requirements.

2. All use of water shall be within the boundaries of the landfill property. During an emergency, this water may be used for fire fighting on the site or on undeveloped areas off and adjacent to the site.

3. No water shall be routinely applied to the disposal site except for landscape irrigation, road maintenance, or for surface dust control. Water used for these purposes shall only be applied by spraying, and shall be applied only on completed lifts, in quantities not to exceed those necessary to reduce immediate dust hazards or support plant life.

4. During periods of precipitation, when the use of extracted waste water is not necessary for the purposes specified in this Order, the waste water shall be stored or hauled to a legal point of disposal.

5. Washing of landfill equipment or vehicles shall be confined to areas where the waste water will not percolate into the disposal areas or native soil, or enter the storm water collection system, unless specifically permitted by waste discharge requirements.

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

6. Water used onsite shall at all times be within the range of 6.0 to 9.0 pH units, and shall not exceed the following limits:

<u>Constituents</u>	<u>Unit</u>	<u>Maximum Limit</u>
COD	mg/l	240
Oil and Grease	mg/l	15
BNA ^[1]	mg/l	0.1
Total Heavy Metals ^[2]	mg/l	1.5
Purgeable Organics ^[3]	ug/l	45.0

[1] BNA shall include the summation of concentrations of all base/neutral and acid extractable organic priority pollutant compounds.

[2] Total heavy metals shall include the combined concentrations of the following metals: arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver and zinc.

[3] Purgeable organic compounds shall include the summation of concentrations including purgeable priority pollutants, acetone and 2-butanone. No individual parameter may exceed 20 percent of the Maximum Limit.

7. Any water used onsite shall not exceed the maximum contaminated levels contained in Title 22, Chapter 15, Article 4, Section 64435, CAC (or subsequent revisions), for heavy metals, nitrates and organic chemicals, and in Section 64473 for copper and zinc. Radioactivity shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Sections 64441 and 64443, CAC (or subsequent revisions).

8. Water use limitations may be modified by the Board based on more recent or complete monitoring data or for any other valid reason.

F. Provisions For Water Quality Monitoring

1. The discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with Section 13267 of the CWC. Failure or refusal to furnish these reports, or falsifying any information provided therein, renders the discharger guilty of a misdemeanor and subject to the penalties stated in Section 13268 of the CWC. Monitoring reports shall be submitted in accordance with the specifications contained in the "Monitoring and Reporting Program" prepared by the Executive Officer. This Monitoring and Reporting Program is subject to periodic revisions as warranted.

2. The effectiveness of all monitoring wells, monitoring devices, and leachate and gas collection systems shall be maintained for the active life of this site and during the closure and post-closure maintenance periods. If any of these wells and/or monitoring devices are damaged, destroyed or abandoned for any reason, the discharger shall provide substitutes to meet the monitoring requirements of this Order.

3. The discharger shall insure that all of the monitoring wells and/or piezometers are in proper operating order at all times. The discharger shall have a "Monitoring Well Preventative Maintenance Program" approved by the Executive Officer. Elements of the program should include, a minimum of periodic visual inspections of the well integrity, pump removal and inspection, etc., plus appropriate inspection frequencies.

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

If a well or piezometer is found to be inoperative, the Regional Board and other interested agencies shall be so informed in writing within 7 days after such discovery, and this notification shall contain a time schedule for returning the well or piezometer to operating order. The initial "Monitoring Well Preventative Maintenance Program" will be due to the Board within 60 days after the adoption of this Order. Changes to the program should be submitted for Executive Officer approval at least 30 days prior to implementing the change(s).

4. For any monitoring wells or piezometers installed in the future, the discharger shall submit technical reports for approval by the Executive Officer, prior to installation. These technical reports shall be submitted at least 90 days prior to the anticipated date of installation of the wells or piezometers. These reports shall be accompanied by:

- a. Maps and cross sections showing the locations of the monitoring facilities; and
- b. Drawings and data showing construction details of the monitoring facilities. These data shall include:
 - (i) casing and bore hole diameters;
 - (ii) casing materials (PVC, stainless steel, etc.)
 - (iii) depth of each hole;
 - (iv) size and positions of perforations;
 - (v) method of joining casing sections together;
 - (vi) nature of filter material;
 - (vii) depth and composition of seals; and
 - (viii) method and length of time of well development.

If a well or piezometer is proposed to replace an inoperative well or piezometer identified in the "Well Preventative Maintenance Program", the discharger shall not delay replacement while waiting for Executive Officer approval. However, the technical report shall be submitted within the required time schedule.

5. The discharger shall provide for the proper handling and disposal of water purged from the wells during sampling. Water pumped from the wells shall not be returned to that well (or any other well), unless appropriate waste discharge requirements have been prescribed, nor shall it be used for dust control or irrigation without waste discharge requirements.

6. Within 60 days of adoption of this Order, CSDLAC shall submit for review and Executive Officer approval, a workplan to develop and evaluate background water quality in the vicinity of the landfill. The workplan shall contain design specifications, proposed locations, and supporting rationale for monitoring wells in accordance with F-4, above, or alternative methods. The proposed monitoring wells will be used to obtain ground water samples representative of water quality equivalent to conditions anticipated to be naturally occurring at the downgradient boundaries of the landfill.

G. Provisions for Containment Structures

1. The site shall have containment structures which are capable of preventing degradation of the waters of the State. Construction standards for containment structures shall comply with Article 4 of Subchapter 15. Any exceptions to these standards must fully meet the standards in Section 2510(b-c). Any deviation from

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

these design specifications is subject to the Executive Officer's review and approval prior to any construction.

2. The site shall be designed to withstand the maximum probable earthquake without damage to the facilities or structures which control leachate, surface drainage, gas collection, or erosion control systems.

3. The discharger shall submit detailed preliminary and as-built plans, specifications, and descriptions for all future containment structures and monitoring systems for Executive Officer approval within 60 days after the adoption of this Order. The preliminary plans shall contain detailed quality assurance/quality control for the proposed construction. No disposal shall occur in a new area until the corresponding construction is completed and certified. The discharger shall also submit a description of and location data for ancillary facilities, including roads, waste handling areas, buildings, and equipment cleaning facilities. These plans and specifications shall be submitted within 30 days after completion of construction. If the preliminary plans and specifications and as-built plans are virtually identical, only change sheets need be submitted in lieu of complete as-built plans. Along with the change sheets or as-builts, the discharger shall submit a program, to be implemented upon request by the Executive Officer, which will provide for testing of any leachate collection and recovery systems to demonstrate their operating efficiency during the operating life of the facility, and during the closure and post-closure maintenance periods.

4. A legal description of the property boundaries of the disposal site shall be provided and permanent survey monuments shall be installed. The discharger shall also provide a scaled drawing of the site showing the legal description boundaries, the boundaries of the fill area, elevations of the disposal area, permanent monuments, structures and other significant features within 60 days of adoption of this Order.

5. Bench marks shall be established and maintained at the site in sufficient number to enable reference to key elevations and to permit control of critical grading and compaction operations.

H. Provisions for Reporting Scheduled Activities

1. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The operator shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

2. The Regional Board shall be notified in writing within 7 days if fluid is detected in a previously dry leachate detection system, an LCRS, or if a progressive increase in the liquid volume is detected in an LCRS.

3. The discharger within 60 days after adoption of this Order shall submit an "Operation Plan", to be approved by the Executive Officer, describing the landfill operation which shall include:

- a. Contingency plans for the failure or breakdown of waste handling facilities which could have any potential water quality effects, including notice of any such failure, or any detection of waste or leachate in monitoring facilities, to the Regional Board, appropriate local governments, and water users downgradient of the landfill.

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

- b. A description of inspection and maintenance programs which will be undertaken regularly during disposal operations, the closure, and the post-closure maintenance period of facilities or equipment which could have any potential water quality effects.
4. The discharger shall notify the Regional Board of changes in information submitted in the ROWD and supplementary information, including any material change in the types, quantities, or concentrations of wastes discharged; or site operations and features. The discharger shall notify the Regional Board at least 120 days before any material change is made.
5. The discharger shall notify the Regional Board in writing of any proposed change of ownership or responsibility for construction, operation, closure, or post-closure maintenance of this facility. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure, and post-closure maintenance will be in compliance with any existing waste discharge requirements and any revisions thereof.
6. The discharger shall comply with the closure notification requirements contained in Section 2590(c)(5) of Subchapter 15. As noted in that Section, closure must be in accordance with an "approved closure plan."
7. The discharger shall submit final closure and post-closure maintenance plans to the Board at least 240 days prior to closure (unless this requirement is less stringent than laws or regulations adopted regarding Closure and Post Closure Plans adopted for other regulatory agencies).
8. The discharger shall submit a plan to be approved by the Executive Officer, within 60 days after adoption of this Order, demonstrating compliance with Subsection 2580(f) of Subchapter 15, which requires that the discharger provide for funding to insure that closure and post-closure maintenance activities are properly performed (unless this requirement is less stringent than laws or regulations adopted regarding closure and post-closure plans adopted for other regulatory agencies).
9. The owner or operator of this disposal site shall notify the Regional Board in writing at least 180 days prior to the beginning of final closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved closure plan and that the plan provides for site closure in compliance with all applicable federal and state regulations. In the event closure and post-closure maintenance plans have not been submitted for this disposal site, they shall accompany this notice.
10. The owner or operator shall notify the Regional Board within 30 days after the completion of final closure activities that closure has been completed. The discharger shall certify under penalty of perjury that all closure activities were performed in accordance with the most recently approved closure plan and in accordance with all applicable regulations. The discharger shall certify that all closed disposal sites shall be maintained in accordance with approved post-closure maintenance plan(s).

**COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL**

File No. 82-67

I. General Provisions

1. CSDLAC shall comply with all other applicable provisions, requirements, and procedures contained in the most recent revision of the CAC, Title 23, Chapter 3, Subchapter 15, "Discharges of Waste to Land", and any amendments thereto.
2. Regional Board staff shall be allowed entry to the landfill, or where records are kept regarding the landfill, at any reasonable time. Staff shall be permitted to inspect any area of the landfill and any monitoring equipment used to demonstrate compliance with this Order. Staff shall be permitted to copy any records, photograph any area, obtain samples, and/or monitor operations to assure compliance with this Order, or as authorized by applicable laws or regulations.
3. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
4. This Board considers the property owner(s) to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge and from gases and leachate that may be caused by infiltration or precipitation of drainage waters into the waste disposal areas or by infiltration of water applied to this property during subsequent use of the land for other purposes.
5. These requirements do not exempt the operator of this waste disposal site from compliance with any other current or future law which may be applicable. The requirements are not a permit; they do not legalize this waste disposal site, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes.
6. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the operators from their liabilities under federal, state or local laws.
7. The filing or a request by the operators for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any condition, provision, or requirement of this Order.
8. This Order does not convey any property rights of any sort, or any exclusive privilege.
9. The discharger must comply with all of the terms, requirements and conditions of this Order. Any violation of this Order constitutes a violation of the CWC, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance, or a combination thereof.
10. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
CALABASAS LANDFILL

File No. 82-67

- c. A change in any condition that required either a temporary or permanent reduction or elimination of the authorized waste discharge.

11. Resolution No. 82-67, adopted August 23, 1982, is hereby rescinded.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on May 22, 1989.



ROBERT P. GHIRELLI, D.Env.
Executive Officer

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. 4992
FOR
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Calabasas Landfill)**

(File No. 82-67)

I. REPORTING

A. The discharger shall implement this Monitoring and Reporting Program beginning 60 days after the adoption of Order No. 89-053. Monitoring reports shall be submitted to the Board monthly, due 45 days from the last day of the month of the monitoring period. The first monitoring report under this program is due September 15, 1989. Subsequent to receipt of any reports required by Water Quality Monitoring item F-4 of Order No. 89-053, this Monitoring and Reporting Program shall be revised accordingly.

B. The discharger shall submit all monitoring data in hard copy form and also monitoring data on computer diskette (5-1/4 inch, 360 or 1200 kilobytes, or 3-1/2 inch, 1.44 or 2.01 megabyte). The monitoring data submitted on diskette should be in ASCII format, and presented in a cumulative, updated form with each submittal. Monitoring data submitted in hard copy form should be in discrete, noncumulative form.

C. Each monitoring report must affirm in writing that all analyses were conducted at a laboratory certified for such analyses in accordance with Section 13176 of the California Water Code and in accordance with current EPA guideline procedures contained in 40 CFR Part 136, or as specified in this Monitoring Program.

D. For any analyses performed for which no procedures are specified in the EPA guidelines or in this Monitoring Program, the constituent or parameter analyzed and the method or procedure used must be specified in the report.

E. The discharger may submit additional data to the Board not required by this Program in order to simplify reporting to other regulatory agencies.

F. The following items in the attached "General Monitoring and Reporting Provisions" shall be applicable to this program: Items 1, 4, 5, 7, 8 (with the exception that the report shall be due March 1st of each year), 9, 10, 11, 12, 13, 14, and 15.

G. Quarterly monitoring shall be performed during the months of February, May, August and November. Annual monitoring shall be performed during the month of November. In the event monitoring is not performed as above because of unforeseen circumstances, substitute monitoring shall be performed as soon as possible after these times, and the reason for the delay shall also be given.

**COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
(Calabasas Landfill)
Monitoring & Reporting Program**

File No. 82-67

H. Where the units for a parameter are listed as ug/l (ppb), suitable analytical techniques shall be used to achieve this precision. All method detection limits and practical quantitation limits shall be below the current Action Levels Recommended by the Department of Health Services, Sanitary Engineering Branch or the minimum limit of detection specified in EPA Methods or Appendix A, 40 CFR 136 if the Action Level is not achievable.

I. Analytical data reported as less than shall be reported as less than a numeric value or below the limit of detection for that particular analytical method (also give the limit of detection).

J. All analytical samples obtained for this Program shall be grab samples.

K. If the discharger performs analyses for any parameter more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the monitoring report.

L. The waste load checking program implemented at the site is approved. The results of the waste load checking program shall be reported in each monitoring report. In the event that hazardous wastes or other unacceptable materials are detected, the type, source, and disposition of those wastes shall also be reported.

M. CSDLAC shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation, and copies of all data submitted to regulatory agencies for a period of at least five years. This period may be extended by request of the Regional Board at any time and shall be extended during the course of any unresolved litigation regarding all or any part of the entire site.

N. Records of monitoring information shall include:

- a. The date, exact place, procedure and time of sampling or measurement;
- b. The individual(s) who performed the sampling or measurement;
- c. The date(s) analyses were performed on the samples;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of the analyses or measurements.

II. Waste Disposal Reporting

A. The first report to the Board shall include a map of the site and shall indicate the area(s) where disposal is taking place or will begin. This map shall be updated monthly and summarized and submitted with the annual report due March 1. If a new area is started, it shall be updated with the corresponding monthly report.

B. A waste disposal report containing the following information shall be filed with this Board each month:

1. A tabular list of the estimated average monthly quantities (in cubic yards and tons) and types of materials (including dewatered sewage sludge) deposited each month.

**COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
(Calabasas Landfill)
Monitoring & Reporting Program**

File No. 82-67

2. An estimate of the remaining capacity (in cubic yards and tons) and the remaining life of the site in years and months.
3. A certification that all wastes deposited were deposited in compliance with the Board's requirements, and that no wastes were deposited outside of the boundaries of the waste management area as specified in the Board's requirements.
4. A description of the location and an estimate of the seepage rate or flow of all known seeps and springs at the site.
5. The estimated amount of water used at the waste management area for landscape irrigation, compaction, dust control etc., during the month. (If other than drinking water is used, the sources and amounts of water from each source shall also be reported.)
6. Quantities of liquid pumped from the leachate monitoring sumps and/or extraction wells, including dates of removal, and the ultimate point of disposal if other than an onsite leachate treatment plant. If no liquid was detected or pumped during the reporting period, a statement to that effect shall be submitted.

C. In addition to reporting the quantity of dewatered sewage sludge deposited each month as noted in IIB above, bimonthly samples (even numbered months) of incoming sludge shall be obtained and analyzed as follows:

1. For a 24-hour period (one operating day at the site) each load of sludge shall be sampled. All of these samples shall be weight-proportion composited and mixed as completely as possible (preferably in the absence of oxygen) into a single sample. The total percent solids of the sample shall be reported.
2. An extraction solution of the sludge shall be prepared for analyses using the Waste Extraction Test (WET) method as contained in the California Department of Health Services' California Assessment Manual for Hazardous Wastes (CAM)* except as follows: 1. The pH of the citrate buffer shall be 4.5. 2. All testing shall be done on the 48-hour extracts only. Additional extracts (for cumulative times of 6, 14 and 30 days) need not be prepared.
3. The extracts shall be analyzed for total Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Tin, Vanadium, Zinc and Total organic halogens (to a precision of ug/dry kg if necessary for detection).
4. The digested sludge itself shall also be analyzed semi-annually for the following parameters (to a precision of ug/dry kg if necessary for detection): Total organic carbon, Total organic halogens, Polychlorinated biphenyls (PCBs), Trichlorethylene (TCE), Perchlorethylene (PCE), Carbon tetrachloride, DDT (and it's metabolites), Endrin, Lindane, Methoxychlor, Toxaphene, 2,4-D and 2,4,5-TP (Silvex).
5. These results shall be reported in the corresponding monthly report.

**COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
(Calabasas Landfill)
Monitoring & Reporting Program**

File No. 82-67

6. Paragraph IK above applies to sludge analyses in the event that the discharger performs more monitoring than required.

D. In the event that treated incinerator ash is disposed of at the landfill, such disposal shall be subject to monitoring and reporting requirements which shall be developed prior to the disposal of this waste.

E. The discharger shall report all unacceptable (to this site) wastes inadvertently received at this site and their disposition. The following details shall be included:

1. The source (if known), including the hauler, of the unacceptable wastes and date received and/or discovered.
2. Identification (if known) and the amount of waste.
3. The name and address of the hauler (who removes the waste from this site), if different from the source.
4. The ultimate point of disposal for the waste.
5. CSDLAC's actions to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual (if applicable).

If no unacceptable wastes were received (or discovered) during the month, the report shall so state.

III. Ground Water Monitoring

A. Provisions and General Requirements

1. For the purposes of this Program, the terms "Monitoring Well", "Extraction Well", "Confirmation Well", "Piezometer", and "Sump" are synonymous.
2. The ground water monitoring program must be carried out during the active life of this waste management area, during the closure and post-closure care periods, and during any interim periods when no wastes are deposited at the site.
3. Analytical results for ground water monitoring shall be submitted with the corresponding monthly waste disposal report. If a well was not sampled (or measured) during the reporting period, the reason for the omission shall be given. If no fluid was detected in a monitoring well, a statement to that effect (in lieu of analyses) shall be submitted.

**COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
(Calabasas Landfill)
Monitoring & Reporting Program**

File No. 82-67

4. Monthly observations and measurements of the static water levels shall be made on all monitoring wells and records of such observations shall be submitted with the monthly reports. All monitoring wells shall be sounded each November to determine total depth. Wells affected by pumping shall be measured prior to pumping insofar as is possible.

5. Unless otherwise stated, all metals analyses shall be filtered for the total metals concentrations. Filtering of water samples may be performed in the field with in-line filters (not less than .045 microns in size). Dissolved metals concentrations may also be analyzed, provided that they are analyzed from separate, unfiltered samples. Both may be performed, if CSDLAC chooses.

6. No filtering of samples taken for VOC's analyses shall be permitted. Samples taken for VOC's analyses shall be taken with dedicated bladder pumps or approved, non-invasive compressed air operated pumps.

7. The velocity and direction of ground water flow under the waste management unit shall be determined quarterly for the first year and every third quarter thereafter. ("Third" means nine months later, not the July to September quarter.)

8. Pumping data regarding fluid pumped from each well (other than for analytical samples) shall be reported to the Board each month in the monthly waste disposal report and shall include:

- a. Date and quantity of fluid pumped, and the method of disposal or reuse purpose if reused.
- b. If no fluid was pumped during the month from any monitoring well, a statement to that effect shall be submitted.

B. Monitoring Well Locations

1. Representative ground water samples shall be obtained from all active monitoring wells at the landfill on a quarterly basis, and reported for at least the following monitoring wells. CSDLAC must also submit data from any additional wells which show any constituents in excess of applicable water objectives on a quarterly basis. A complete set of quarterly monitoring data for all active wells will be submitted with each annual report. CA-series well waters do not correlate to any known aquifers. For this reason, though they will be similarly monitored, they will be regulated only to determine that no priority pollutants have migrated laterally or vertically offsite.

Well Identification By Area

Background	Barrier 1	Barrier 2	Barrier 3	Barrier 4	Barrier 5	Offsite
MW4	M02A	M05A	M09A	M12A	M07A	CA2A
CA22	M02B	M05B	M09B	M12B	M07B	CA7
CA24						CA9
CA25						CA11

**COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
(Calabasas Landfill)
Monitoring & Reporting Program**

File No. 82-67

C. Sampling and Analyses

1. The following are the indicator parameters for this facility: Electrical conductivity, chloride, sulfate, pH, total organic halogen, BOD, and COD.

2. Routine quarterly sampling and analyses shall consist of the following parameters:

<u>Parameters</u>	<u>Units</u>
pH ^[1]	pH units
Electrical conductivity	umhos/cm
BOD ₅ 20°C	mg/l
COD	mg/l
Total dissolved solids	mg/l
Boron	mg/l
Alkalinity ^[1]	mg/l
Ammonia (as N)	mg/l
Bicarbonate (HCO ₃)	mg/l
Calcium	mg/l
Chloride	mg/l
Iron (total and dissolved)	mg/l
Total Hardness (as CaCO ₃)	mg/l
CO ₂ ^[1]	mg/l
Fluoride	mg/l
Sulfate	mg/l
Sodium	mg/l
Potassium	mg/l
Nitrate (as N)	mg/l
Total organic carbon	mg/l
Total organic halogens	ug/l
Benzene	ug/l
Carbon tetrachloride	ug/l
Chlorobenzene	ug/l
1,1 Dichloroethane	ug/l
1,2 Dichloroethane	ug/l
1,1 Dichloroethene	ug/l
1,2 Dichloroethene	ug/l
Ethylene Dibromide	ug/l
Trichloroethylene	ug/l
Perchloroethylene	ug/l
Vinyl chloride	ug/l

[1] Although field determination is the preferred procedure for pH in the presence of dissolved carbon dioxide, pH may be determined in the laboratory if the total elapsed time between sampling and testing is less than 6 hours and the sample is properly sealed during transit. Each report shall certify that

**COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
(Calabasas Landfill)
Monitoring & Reporting Program**

File No. 82-67

these conditions were met if laboratory determination of these parameters was done in lieu of field determination.

3. The following shall be sampled quarterly for the first year that this program is in effect and yearly thereafter (during the month of November), provided further quarterly sampling is not warranted by the presence of appreciable contamination:

a. Volatiles, semi-volatiles, Pesticides and PCBs using EPA Methods 624, 625 and 8080. Methods 601 and 602 may be substituted for 624. All peaks greater than 10% of the internal standard should be identified and quantified for gas chromatography analyses. After the first year of monitoring, determinations by Method 8080 will not be required unless warranted by the presence of appreciable contamination.

b. The following metals: antimony, arsenic, barium, beryllium, cadmium, total chromium, cobalt, copper, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, and zinc. Total cyanide and sulfides shall also be determined under this schedule.

c. Acrolein and acrylonitrile (using EPA Methods 603 or 8030). After the first year of monitoring, determinations by Methods 603 and 8030 will not be required unless warranted by the presence of appreciable contamination.

IV. Barrier Extraction Well Monitoring

A. Provisions

1. The extraction well monitoring program must be carried out during the active life of this facility and during the closure and post closure care periods.
2. Analytical results for the extraction well monitoring shall be submitted with the corresponding monthly waste disposal report. If all wells are dry and samples cannot be obtained, the report shall so state.
3. Provisions A-2, A-3, A-5, and A-7 of the Ground Water Monitoring section above shall be applicable to this section insofar as is possible.

B. Sampling and Analyses

1. Representative ground water samples shall be obtained according to the following schedule from the existing extraction well systems. Upon completion of all future proposed extraction well systems, the following monitoring program shall also be applicable.

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
(Calabasas Landfill)
Monitoring & Reporting Program

File No. 82-67

<u>Parameter</u>	<u>Units of Analysis</u>	<u>Minimum Frequency</u>
Flow	gpd	monthly
pH	units	monthly
BOD ₅ 20°C	mg/l	monthly
COD	mg/l	monthly
Total Dissolved Solids	mg/l	monthly
Chloride	mg/l	monthly
Sulfate	mg/l	monthly

2. The LCRS systems shall be sampled quarterly for the first year that this program is in effect and yearly thereafter (during the month of November) at all barriers. These samples shall be analyzed for volatiles, semi-volatiles, pesticides and PCB's using EPA Methods 624, 625 and 8080. Methods 601 and 602 may be substituted for 624. After completion of one year of monitoring, determinations by Method 8080 will not be required unless warranted by the presence of appreciable contamination. All peaks greater than 10% of the internal standard should be identified and quantified for gas chromatography analyses. The following metals shall also be determined from filtered samples: antimony, arsenic, barium, beryllium, cadmium, total chromium, cobalt, copper, lead, mercury, manganese, nickel, potassium, selenium, silver, and zinc. Total cyanide and sulfides shall also be determined.

V. Monitoring of Extracted Water Proposed for Reuse Onsite

A. Provisions

1. If extracted water is not proposed for reuse onsite, the remainder of this monitoring program will not apply to the Calabasas Landfill.
2. If extracted water is at any time proposed for reuse onsite, the remainder of this monitoring program must be carried out during the active life of this waste management area, during the closure and post-closure care periods, and during periods when no waste is being deposited at the site.
3. Analytical results for waste water monitoring shall be submitted with the corresponding monthly waste disposal report. If a waste water source was not sampled or measured during a reporting period, a reason for the omission shall be given. If a waste water source was not used during a reporting period, a statement to that effect shall be submitted.

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
(Calabasas Landfill)
Monitoring & Reporting Program

File No. 82-67

B. Sampling and Analyses

1. A sampling station shall be established where representative samples of each effluent source can be obtained. Water samples shall be obtained at a sampling station prior to being mixed with other water.
2. Unless otherwise stated, all metals analyses shall be for total metal in a filtered sample. You may also analyze and report the dissolved phase in an unfiltered sample if you so choose.
3. The following shall constitute the monitoring program for extracted water for use onsite:

<u>Parameter</u>	<u>Units</u>	<u>Minimum Frequency of Analyses</u>
Flow ^[1]	gpd	daily
pH	pH units	quarterly
COD	mg/l	quarterly
Nitrates (as NO ₃)	mg/l	quarterly
Oil and Grease	mg/l	quarterly
BNA ^[2]	mg/l	quarterly
Heavy Metals ^[3]	mg/l	quarterly
Purgeable Organics ^[4]	ug/l	quarterly
Gross Alpha ^[5]	pCi/l	annually
Gross Beta	pCi/l	annually

[1] Total daily and monthly volume of effluent used shall be reported. In the event that the effluent is commingled with other water, the volume of effluent from each source and the total water used shall be reported.

[2] BNA shall include all base/neutral compounds and acid extractable organic priority pollutant compounds. If these parameters are monitored on influent samples of onsite reuse waters, monitoring of effluent samples for these parameters will not be required.

[3] Heavy metals shall include the sample analyses results of the following metals: arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver and zinc. Concentrations for each parameter shall be reported. If these parameters are monitored on influent samples of onsite reuse waters, monitoring of effluent samples for these parameters will not be required.

[4] Purgeable organic compounds shall include all purgeable priority pollutants, plus acetone and 2-butanone.

[5] If gross alpha activity exceeds 5 pico Curies per liter (pCi/l), measurement for radium-226 shall be made. If radium-226 exceeds 3 pCi/l, measurement for radium-228 shall be made.

4. Once each year, during the month of November, all extracted water proposed for onsite use shall be sampled and analyzed for volatiles, semi-volatiles, pesticides and PCBs using EPA methods 624, 625 and

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY
(Calabasas Landfill)
Monitoring & Reporting Program

File No. 82-67

8080. Methods 602 and 602 may be substituted for 624. All peaks greater than 10% of the internal standard shall be identified and quantified for gas chromatography analyses. Total cyanide and sulfides shall also be determined. Duplication of analyses of parameters in V.B.3 are not necessary.

C. Reporting of Water Used Onsite

1. Within 30 days from the effective date of this Order, the discharger shall submit to this Board a technical report concerning the complete description of each existing and/or proposed effluent sampling station together with the data to support the conclusion that the proposed station will provide samples representative of the entire flow from that source.

2. Each monitoring report shall include:

a. A statement that, during the reporting period, all waste water was used only as specified, and for the uses specified, in the waste discharge requirements.

b. Approximate acreage receiving reused water for irrigation (if any).

c. Analytical results for waste water shall be submitted with the corresponding monthly report. If a waste water source was not sampled or measured during the reporting period, the reason for the omission shall be given. If no waste water was extracted or used from a source, a statement to that effect shall be provided in lieu of analyses.

d. Records of operational problems, mechanical breakdowns, and diversions to emergency storage or disposal associated with any violation, or potential violations of waste discharge requirements.

e. Any corrective actions taken.

3. If all or a portion of the water was not reused because of a failure to meet the limits specified in the waste discharge requirements, the report shall so state and identify the disposition of the effluent.

Ordered By:



ROBERT P. GHIRELLI, D.Env.
Executive Officer

Date:

May 22, 1989